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Fumiaki Koga

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EXAMINER

VU, NGOC K

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,129	<b>Applicant(s)</b> KOGA, FUMIAKI	
	<b>Examiner</b> NGOC K. VU	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Japan 2003-100033 on April 03, 2003. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 9, 10, and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Unger (US 20020152473 A1).

Regarding claim 1, Unger teaches a receiving apparatus, characterized by including: a first receiving means (within broadcast interface 302 such as tuner 400, digitizer 402, switch 304, and 206-208) for receiving a signal with a specific frequency (e.g., via tuner 400) which is transmitted from a broadcasting-station apparatus (broadcast headend) (see FIG. 3-4, 0027); a power-supply controlling means (304) for controlling a power supply (220) to the first receiving means (see 0023, 0029; FIG. 4); and a second receiving means (within sensor 306) for receiving an operation signal (e.g., via tuner 500) which is transmitted from the broadcasting-station apparatus, using a frequency except the specific frequency (see 0029, 0033, FIG. 5), the second receiving means outputting a power-supply control signal (WU) to the power-supply

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controlling means, according to the operation signal (see FIG. 3, 0023), and the power-supply controlling means (304) controlling a power supply (220) to the first receiving means, according to the power-supply control signal (see 0012, 0029, and FIG. 4).

Regarding claim 2, Unger teaches that if the power supply to the first receiving means (302) is stopped by the power-supply controlling means (by opening switch 410 in standby mode), the second receiving means receives a start signal (wake-up signal) which is transmitted from a broadcasting-station apparatus using a frequency except the specific frequency as the operation signal, and according to the start signal, outputs a power-supply instruction signal (WU) as the power-supply control signal to the power-supply controlling means (304); and the power-supply controlling means (304) executes a power supply (220) to the first receiving means, according to the power-supply instruction signal (see 0033, 0023, 0028, 0029, 0012, and FIG. 4).

Regarding claim 3, Unger further teaches that the receiving apparatus belongs to a group which is predetermined from among a plurality of groups (it is noted that the broadcaster awaken only a group of selected specified receivers); the start signal includes group specification information for specifying the group (the wake-up signal includes identifier); and if the second receiving means receives, as the start signal, the group specification information for specifying the group to which the receiving apparatus that includes the second receiving means belongs, then the second receiving means outputs the power-supply instruction signal to the power-supply controlling means (the received identifier is compared to a stored a receiver identifier 506, if matched, sensor 306 provides instruction signal to close switch 304 for supplying power to tuner 400) (see 0031, 0033, and FIG. 3-4).

Regarding claim 4, Unger teaches that the start signal includes a plurality of carrier signals which are inserted within a frequency band where the signal with the specific frequency

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is not yet used (the wake-up signal associated with one broadcast carrier frequency); and the second receiving means has, a plurality of wave-detecting means (306) for detecting each carrier signal, and an extracting means (within 306) for extracting information (specified identifier) which is included in the start signal based on a detection result of the carrier signals by the plurality of wave-detecting means (for instance, tuner 500 is tuned to a carrier frequency that the broadcaster uses to convey wake-up signals which comprise the specified identifier. See 0029, 0033).

Regarding claim 5, Unger teaches that the extracting means outputs the power-supply instruction signal to the power-supply controlling means (304), if the group specification information coincides with digital data which is made up of the detection result of the carrier signals by the plurality of wave-detecting means (for instance, the received identifier from the wake-up signal is compared to a stored a receiver identifier 506, if matched, sensor 306 provides instruction signal to close switch 304 for supplying power to tuner 400. See 0033).

Regarding claim 9, Unger teaches that the first receiving means has, a tuner section (400) which receives the signal with the specific frequency, a demodulation section (within 400) which demodulates a signal that is received by the tuner section, a conversion section (within 208, 206) which converts a signal that is demodulated by the demodulation section into a visual signal and an audio signal, and a control section (within 302 and/or 300) which controls an operation of the tuner section, the demodulation section and the conversion section; and the power-supply controlling means (304) stops the power supply to the tuner section, the demodulation section, the conversion section and the control section, at least until the second receiving means receives the start signal (wake-up signal) (see 0028, FIG. 3-4).

Regarding claim 10, Unger teaches that after executing a power supply to the first receiving means according to the power-supply instruction signal, the power-supply controlling

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means stops a power supply to the second receiving means (receiver 300 enters the standby mode upon completion of the update - see 0035).

Regarding claim 12, Unger teaches a display apparatus (as shown in FIG 3), characterized by including a receiving apparatus (receiver 300), and a displaying means (TV) for displaying a broadcast image which is received by the receiving apparatus, the receiving apparatus having: a first receiving means (within broadcast interface 302 such as tuner 400, digitizer 402, switch 304, and 206-208) for receiving a signal with a specific frequency (e.g., via tuner 400) which is transmitted from a broadcasting-station apparatus (broadcast headend) (see FIG. 3-4, 0027); a power-supply controlling means (304) for controlling a power supply (220) to the first receiving means (see 0023, 0029; FIG. 4); and a second receiving means (within sensor 306) for receiving an operation signal (e.g., via tuner 500) which is transmitted from the broadcasting-station apparatus, using a frequency except the specific frequency (see 0029, 0033, FIG. 5), the second receiving means outputting a power-supply control signal (WU) to the power-supply controlling means, according to the operation signal (see FIG. 3, 0023), and the power-supply controlling means (304) controlling a power supply (220) to the first receiving means, according to the power-supply control signal (see 0012, 0029, and FIG. 4).

Regarding claim 13, see rejection of claim 2.

Regarding claim 14, Unger teaches a display apparatus according to claim 13, characterized in that the power-supply controlling means stops the power supply to the first receiving means and the displaying means (standby mode), at least until the second receiving means receives the start signal (until tuner 500 receives wake-up signal) (see 0022, 0023).

Regarding claim 15, Unger teaches a television broadcasting system (as shown in FIG. 1), which includes a broadcasting-station apparatus (broadcast headend) that transmits a signal with a specific frequency, and a plurality of receiving apparatus (104, 300) that receive a signal

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which is transmitted from the broadcasting-station apparatus, characterized in that: the broadcasting-station apparatus transmits an operation signal (wake-up signal) to the receiving apparatus, using a frequency except the specific frequency; the receiving apparatus has, a first receiving means (within broadcast interface 302 such as tuner 400, digitizer 402, switch 304, and 206-208) for receiving a signal with a specific frequency (e.g., via tuner 400) which is transmitted from a broadcasting-station apparatus (broadcast headend) (see FIG. 3-4, 0027); a power-supply controlling means (304) for controlling a power supply (220) to the first receiving means (see 0023, 0029; FIG. 4); and a second receiving means (within sensor 306) for receiving an operation signal (e.g., via tuner 500) which is transmitted from the broadcasting-station apparatus, using a frequency except the specific frequency (see 0029, 0033, FIG. 5), the second receiving means outputting a power-supply control signal (WU) to the power-supply controlling means, according to the operation signal (see FIG. 3, 0023), and the power-supply controlling means (304) controlling a power supply (220) to the first receiving means, according to the power-supply control signal (see 0012, 0029, and FIG. 4).

Regarding claim 16, see rejection of claim 2.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger in view of Nah (US 5,673,088).

Regarding claims 6-7, Unger teaches that the start signal includes a plurality of carrier signals which are inserted within a frequency band where the signal with the specific frequency

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is not yet used (the wake-up signal associated with one broadcast carrier frequency); and the second receiving means has a wave detecting means for detecting a carrier signal, and an extracting means (within 306) for extracting information (specified identifier) which is included in the start signal based on a detection result of the carrier signals by the plurality of wave-detecting means (for instance, tuner 500 is tuned to a carrier frequency that the broadcaster uses to convey wake-up signals which comprise the specified identifier. See 0029, 0033). Unger does not explicitly teach the second receiving means has a plurality of filter means for allowing the carrier signals to pass through, the filter means being provided for each carrier signal, a choosing means for choosing and outputting an output of one filter means, one after another, from among the plurality of filter means. However, Nah teaches a receiver includes a plurality of filters within unit 26 for allowing the carrier signals to pass through. For instance, trap circuits trap signals having frequencies of 4.5 MHz, 5.5 MHz, 6.0 MHz and 6.5 MHz. The receiver also has a switch 27 for choosing and outputting an output of one filters, one after another, from among the plurality of filters. See FIG. 4, and col. 4, lines 31-43. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Unger by adding a plurality of filters for allowing the carrier signals to pass through, the filters being provided for each carrier signal, and a switch for choosing and outputting an output of one filter, one after another, from among the plurality of filters as taught by Nah for the purpose of having more flexibility for selecting a desired frequency range.

Further regarding claim 7, FIG. 4 of the Nah reference further shows a controlling means 40 for controlling the passing frequency band of the variable filter means (26-27).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unger in view of Tanaka (US 20040268392).



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Unger teaches providing the wake-up signal to receiver 300 via tuner 500 and executing a power supply 220 to the first receiving means 302. See 0023, 0029. Unger fails to teach that the wake-up signal includes time information for specified a time when the first receiving means should be started. However, Tanaka discloses that a receiver checks the current time from the time information included in the reception signal thereby controlling each circuit to execute predetermined operation at a predetermined time. See 0076. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wake-up signal of Unger by including time information for specified a time as disclosed by Tanaka in order to remotely control component(s) of the receiver to execute a predetermined operation such as updating information at a predetermined time.

#### ***Allowable Subject Matter***

8. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Unger discloses that receiver 300 enters the standby mode upon completion of the update (see 0035). Poltorak (US 20030216133) teaches an apparatus and method for providing emergency broadcast information via a media playing device in such emergency broadcast control device 15 can generates and transmits an appropriate control signal to turn media playing device 11 "off" if it was determined to be in the "off" operating state (see 0115 and FIG. 3A-B). Both, either in alone or in combination, fail to teach the specific features recited in claim 11.

#### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Englert (US 20060082690) teaches an apparatus having tuner power dissipation reduction in a standby mode.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGOC K. VU whose telephone number is (571)272-7306. The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NGOC K. VU/  
Primary Examiner, Art Unit 2421